

PENDING CLAIMS FOLLOWING THE AMENDMENT OF OCTOBER 24, 2002

Claims 2, 5, 7-13, and 15 are pending, as follows:

1 2. (Amended) The timing device according to claim 10, wherein the at least
2 one sensor unit for scanning the first group and the at least one higher-order group of
3 code markings consists of a single sensor-emitter-unit.

1 5. (Amended) The timing device according to claim 10, wherein in the
2 sensor unit a two-channel evaluation of the optical signals is performed.

1 7. (Twice amended) The timing device according to claim 10, wherein the
2 groups of code markings have a predefined difference between their optical density
3 levels.

1 8. (Amended) The timing device according to claim 7, wherein the optical
2 density levels correspond to different gray levels which can span a range between light-
3 blocking and almost complete transparency.

1 9. (Amended) The timing device according to claim 8, wherein the carrier of
2 the timing device is made of a reflecting material and the groups of code markings have
 different degrees of reflectivity.

1 10. (Twice amended) A timing device comprising a carrier having a first
2 group of code markings and at least one higher-order group of code markings disposed
3 in at least one code track, said first and at least one higher-order group of code
4 markings being scanned by at least one sensor unit to produce signals, said at least
5 one sensor unit comprising a light source and a photo-transistor, wherein the at least
6 one code track has a different optical density compared to the first group, wherein the
7 code markings of the at least one higher-order group overlap with the code markings of
8 the first group in the at least one code track, wherein the code markings of the first
9 group are equally spaced from one another, whereas the code markings of the at least
10 one higher-order group are distributed over the code track with an arbitrary spacing and
11 form segments on the timing device for controlling different functions, wherein the first
12 group of code markings has a predetermined optical density and the at least one
13 higher-order group of code markings has an optical density different from that of the
14 first group, wherein the groups of code markings have a detectable gradation of optical
15 density levels, and wherein the detectable gradation is used for generating control or
16 position signals.

1 11. (Amended) The timing device of claim 10, wherein said different
2 functions include at least one of the functions of controlling a start position, controlling
3 an end position, calibrating the timing device, and determining an absolute position of
1 the timing device.

1 12. (Twice amended) A positioning device, comprising a timing device with

a carrier having a first group of code markings and at least one higher-order group of code markings disposed in at least one code track, with the code markings being scanned by at least one sensor unit for producing a signal, said at least one sensor unit comprising a light source and a photo-transistor, wherein the at least one code track has a different optical density compared to the first group, wherein the code markings of the at least one higher-order group overlap with the code markings of the first group in the at least one code track, wherein the code markings of the first group are spaced at constant intervals from one another, whereas the code markings of the at least one higher-order group are distributed over the code track with an arbitrary spacing and form segments on the timing device for controlling different functions, and wherein the code markings of the at least one higher-order group are used for at least one of the purposes of controlling a start position, controlling an end position, calibrating the timing device, and determining an absolute position of the timing device; said positioning device further comprising a signal processing device that converts the sensor signal into a control signal and is connected after the sensor unit, wherein the first group of code markings has a predetermined optical density and the at least one higher-order group of code markings has an optical density different from that of the first group, wherein the groups of code markings have a detectable gradation of optical density levels, and wherein the detectable gradation is used for generating control or position signals.

13. (Amended) The timing device according to claim 10, wherein the light source is an LED.

1 15. (Amended) The timing device according to claim 10, wherein in the
2 sensor unit a multi--channel evaluation of the optical signals is performed.

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